

NWS Form E-5

(04-2006)

(PRES. BY NWS Instruction 10-924)

U.S. DEPARTMENT OF COMMERCE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL WEATHER SERVICE

HYDROLOGIC SERVICE AREA (HSA)

San Juan, Puerto Rico

MONTHLY REPORT OF HYDROLOGIC CONDITIONS

REPORT FOR:

MONTH

YEAR

July

2013

TO: Hydrologic Information Center, W/OS31
NOAA's National Weather Service
1325 East West Highway
Silver Spring, MD 20910-3283

SIGNATURE

Althea Austin-Smith,
Service Hydrologist

DATE

08/04/2013

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

☐

An X inside this box indicates that no flooding occurred within this hydrologic service area.

Summary: The San Juan ASOS reported 14.18 inches (record) of rain for the month of July; 9.11 inches greater than the normal of 5.07 inches. The ASOS rainfall report from Cyril E. King Airport in St. Thomas was 4.29 inches for the month of July; 1.44 inches greater than the normal of 2.85 inches. The ASOS rainfall report from Christiansted Airport in St. Croix was 1.70 inches for the month of July; 1.34 inches less than the normal of 3.04 inches.

"July 2013 turned out to be the wettest July on record in the San Juan Metro Area, and the ninth wettest at Cyril E. King Airport, Saint Thomas, which was indicative of continued deep moisture transport and general troughiness over the area. In addition to aforementioned features, the first strong tropical wave of the 2013 Atlantic Hurricane Season to affect Puerto Rico and the US Virgin Islands brought heavy rainfall and cool temperatures to the region on July 18th. While widespread rainfall totals of 3 to 5 inches were observed across the eastern half of Puerto Rico during the tropical wave passage, the highest rainfall amounts were noted across the San Juan Metro Area with totals in excess of 9 inches. By the end of the month, the widespread heavy rains ended, and once again, shower and thunderstorm activity shifted to a more typical pattern, with areas of locally induced activity."

(Excerpt - Please see (<http://www.srh.noaa.gov/sju/?n=jul2013cr>) for July's complete Climate Report.)

The highlight of the month of July was the rainfall amounts...much localized but very intense. In Saint Thomas, a 24 hr. rainfall report of 2.18 inches on July 28th broke the previous record of 0.49 inches of rain set back in 1958. In San Juan, a 24 hr. rainfall report of 9.23 inches on July 18th broke the previous record of 3.19 inches of rain set back in 1950. Additionally, in San Juan July 2013 ended as the wettest July on record with 14.18 inches of rain.

As expected with these types of rainfall amounts, the result was flash flooding in many areas...road closures, evacuations and debris flow. Fortunately, there were no reports of deaths or injury from these events. One man was rescued after his car was swept away on Rio Cibuco in Vega Alta, PR. Vega Alta, Vega Baja and the San Juan Metro Area experienced the greatest impacts from the record rainfall on July 18th. Please refer to the Local Storm Reports and the July E3 crest report for details of flooding throughout the month.

(Please see details in the [July "E3" Flood Crest Report](#) and the Local Storm Reports table below)
See details of some flood reports in the LSR reports below:

| Local Storm Reports for July 2013 | | | |
|---|-------------|-------------------------|------------------------------------|
| ..TIME... | ...EVENT... | ...CITY LOCATION... | ...LAT.LON... |
| ..DATE... |MAG.... | ..COUNTY LOCATION..ST.. | ...SOURCE.... |
| 0142 PM 07/01/2013 | FLOOD | JUNCOS JUNCOS | 18.23N 65.92W PR EMERGENCY MNGR |
| ROAD PR-186 WAS REPORTED FLOODED. | | | |
| 0615 PM 07/13/2013 | FLOOD | VEGA ALTA VEGA ALTA | 18.42N 66.32W PR EMERGENCY MNGR |
| ROAD 620 AND 647 AT VEGA ALTA CLOSED...RIO CIBUCO OUT OF ITS BANKS. | | | |
| 1004 PM 07/13/2013 | FLASH FLOOD | VEGA ALTA VEGA ALTA | 18.42N 66.32W PR EMERGENCY MNGR |
| CAR SWEEP BY THE WATERS OF RIO CIBUCO IN VEGA ALTA. THE MAN IN THE CAR WAS RESCUED. THE INFORMATION WAS OBTAINED FROM SOCIAL MEDIA. | | | |
| 1240 PM 07/18/2013 | FLOOD | VEGA ALTA VEGA ALTA | 18.42N 66.32W PR EMERGENCY MNGR |
| ROAD NUMBER 2 CLOSED DUE TO FLOODING. | | | |
| 1112 AM 07/18/2013 | FLASH FLOOD | VEGA ALTA VEGA ALTA | 18.42N 66.32W PR EMERGENCY MNGR |
| RIVERS MACHCHAL AND PONDEROSA ARE OUT OF THEIR BANKS. | | | |
| 0300 PM 07/18/2013 | FLASH FLOOD | VEGA ALTA VEGA ALTA | 18.42N 66.32W PR EMERGENCY MNGR |
| THE FOLLOWING HIGHWAYS WERE IMPASSABLE HIGHWAY 620 AT FATIMA, 677 CADELARIA, 647 VEGA ALTA, 667 AND 675 AT BAJURA, 690 AND HIGHWAY 2 IN SABANA. | | | |
| 0356 PM 07/18/2013 | FLASH FLOOD | NAGUABO NAGUABO | 18.21N 65.74W PR EMERGENCY MNGR |
| HIGHWAY 31 FLOODED--RIO BLANCO OUT OF ITS BANKS. | | | |
| 0200 PM 07/18/2013 | DEBRIS FLOW | YABUCOA YABUCOA | 18.05N 65.88W PR EMERGENCY MNGR |
| MUDSLIDE IN BARRIO LA PICA. | | | |
| 1034 AM | FLOOD | MANATI | 18.43N 66.48W |

| | | | | |
|------------|-------|---|----|----------------|
| 07/22/2013 | | MANATI | PR | PUBLIC |
| | | DOWNTOWN MANATI FLOODED. | | |
| 1115 AM | FLOOD | ARECIBO | | 18.46N 66.74W |
| 07/22/2013 | | ARECIBO | PR | PUBLIC |
| | | NEIGHBORHOOD REPARTO MARQUEZ IN ARECIBO ROADS FLOODED. | | |
| 1117 AM | FLOOD | BARCELONETA | | 18.45N 66.54W |
| 07/22/2013 | | MANATI | PR | PUBLIC |
| | | SMALL STREAM NEAR OUTLETS MALL IN BARCELONETA OUT OF ITS BANKS. | | |
| 0145 PM | FLOOD | SAN JUAN | | 18.41N 66.06W |
| 07/22/2013 | | SAN JUAN | PR | PUBLIC |
| | | VIEQUES STREET IN HATO REY FLOODED. | | |
| 0435 PM | FLOOD | HORMIGUEROS | | 18.14N 67.12W |
| 07/22/2013 | | MAYAGUEZ | PR | EMERGENCY MNGR |
| | | FLOODING IN LOW LYING AREAS ALONG ROAD 114 IN HORMIGUEROS. | | |
| 0448 PM | FLOOD | MAYAGUEZ | | 18.20N 67.14W |
| 07/22/2013 | | MAYAGUEZ | PR | PUBLIC |
| | | NENADICH AVENUE IN MAYAGUEZ FLOODED. | | |

The approximate amounts of Hydrologic Products issued during the month of July are as follows:

| Non-Routine Hydrologic Products Issued: | Approximate number of Products for the month |
|---|--|
| Hydrologic Outlooks (SJUESFSJU) | 0 |
| Flood Watches (SJUFFASJU) | 11 |
| Flood Warnings (SJUFLWSJU) | 4 |
| Flash Flood Warnings (SJUFFWSJU) | 10 |
| Flash Flood Statements (SJUFFSSJU) | 9 |
| Urban/Small Stream Flood Advisories (SJUFLSSJU) | 76 |

For monthly “radar totals” use the archive of the Advanced Hydrologic Prediction Service (AHPS) - click on the Precipitation interface for San Juan, Puerto Rico and request the duration you would like to view...daily or monthly remembering that the 24 hour totals are from 12z – 12z (8am to 8am in PR) - [AHPS archive of radar totals/ images](#) . Here are the [July 2013 totals](#).